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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/535,674	05/22/2006	Thomas Frochlich	BUSS3001/FJD	7672

23364 7590 10/01/2007  
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EXAMINER
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KHUU, HIEN DIEU THI

ART UNIT	PAPER NUMBER
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2863

MAIL DATE	DELIVERY MODE
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10/01/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/535,674

Applicant(s)

FROELICH ET AL.

Examiner

Cindy D. Khuu

Art Unit

2863

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 12-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 12-17 and 22 is/are rejected.
- 7) ☒ Claim(s) 18-21 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 May 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 12-17 and 22 are rejected under 35 U.S.C. 102(a) as being anticipated by Schaffer et al. (US 2005/0137812).

With respect to claim 12, Schaffer discloses a flow measuring device (fig. 2) for determining and/or monitoring the volume, and/or mass, flow rate of a medium flowing through a containment in a streaming direction (paragraph 0040), comprising:

at least one ultrasonic transducer (29 and 31), which emits and/or receives ultrasonic measuring signals (paragraph 0060); and

a control/evaluation unit (13), which determines the volume, and/or mass, flow rate of the medium in the containment on the basis of the ultrasonic measuring signals according to the travel-time-difference principle (paragraph 0040) or according to the Doppler principle (paragraph 0062), wherein:

associated with said control/evaluation unit is at least one component of high power uptake (11, 13; amplifier and processor); and

said control/evaluation unit is embodied such that said at least one component of high power uptake is operated intermittently in a measuring phase and in an idle phase (paragraph 0049), wherein said at least one component is activated in the measuring phase, while said at least one component has a reduced power uptake, or is turned off, in the idle phase (paragraphs 0051-0052).

With respect to claim 13, Schaffer discloses further a flow measuring device wherein: the flow measuring device is a clamp-on flow measuring device or a measuring device which can be placed within the containment (fig. 2).

With respect to claim 14, Schaffer discloses further a flow measuring device wherein: said at least one the component of high power uptake is one of: an amplifier (11), an analog/digital converter, a microprocessor (13) or a logic chip.

With respect to claim 15, Schaffer discloses further a flow measuring device further comprising: at least one component having a switching function, said at least one component having the switching function activates, or deactivates, said at least one component of high power uptake (paragraph 0056).

With respect to claim 16, Schaffer discloses further a flow measuring device wherein: a mechanism for decreasing current consumption is integrated into said at least one component of high power take up (paragraphs 0056 and 0067).

With respect to claim 17, Schaffer discloses further a flow measuring device wherein: said at least one component having a switching function comprises a semiconductor switch (paragraph 0056; it is inherent that there is a switching function contained in order to have the active and inactive modes).

With respect to claim 22, Schaffer discloses a flow measuring device further comprising: an energy storage element (21 and 23) associated with said control/evaluation unit, which is sized such that it can at least store the energy required in the measuring phase (paragraph 0048).

***Allowable Subject Matter***

Claims 18-21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: The prior art of record, taken alone or in combination, fails to disclose or render obvious, which makes the following claims allowable over the prior art:

With respect to claim 18, a flow measuring device wherein: the time span between two successive measuring, or idle, phases of said at least one component of high power uptake and/or the duration of a measuring phase (t2) and/or the duration of an idle phase (t1) of said at least one component of high power uptake is/are predetermined.

With respect to claim 19, a flow measuring device further comprising: an input unit, via which the time span between two successive measuring, or idle, phases of said at least one component of high power takeup and/or the duration of a measuring phase (t2) and/or the duration of an idle phase (t1) of said at least one component of high power takeup is predeterminable.

With respect to claim 20, a flow measuring device wherein: said control/evaluation unit determines the travel time of the measuring signals on the basis of predetermined system and/or process variables and specifies the time span between two successive measuring, or idle, phases of said at least one component of high power takeup and/or the duration of a measuring phase (t2) and/or the duration of an idle phase (t1) of said at least one component of high power takeup, as a function of the determined travel time.

With respect to claim 21, a flow measuring device wherein: said control/evaluation unit determines the travel time of the measuring signals on the basis of predetermined system and/or process variables, and said control/evaluation unit predetermines the time span between two successive measuring, or idle, phases of said at least one component of high power takeup and/or the duration of a measuring phase (t2) and/or the duration of an idle phase (t1) of said at least one component of high power takeup, as a function of the determined travel time and as a function of the energy which is available.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

**Conclusion**

The following prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Kishimoto et al. (US 6,928,369), Jacobson et al. (US 4,787,252) and Ao (US 6,626,049).


**Fax/Telephone Information**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cindy D. Khoo whose telephone number is (571) 272-8585. The examiner can normally be reached on M-F, 7:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on (571) 272-2269. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CAR 9/24/07

  
John Barlow  
Supervisory Patent Examiner  
Technology Center 2800